

BOARD OF COUNTY COMMISSIONERS

MEMORANDUM

DATE: July 18, 2002
TO: Honorable Chairman and Members of the Board
Parwez Alam, County Administrator
FROM: Pat Curtis, MIS Director *PC*
Through Kim Dressel, Management Services Group Director *Kim Dressel*
SUBJECT: Downtown Digital Canopy Update

During the June 18, 2002 Leon County MIS Technology Update Workshop, the Board asked about the status of the 12-block downtown Digital Canopy (DC) pilot project, which closed on June 30th. Staff advised that a City Commission agenda item, regarding extending the project, was scheduled for June 19, 2002. That agenda item and the City Commission's action are being provided as an update.

Summary of City's Action: The City Commission approved the DC wireless network project transition phase and feasibility study/business plan development, including: (1) engaging NCGI/Mainline as Project manager; (2) expanding the downtown network from the current 12-block area to a 20-block area; (3) acquiring user devices to enable City staff to continue evaluation; (4) providing estimated funding of \$408,450 (from electric utility funds).

Issue Analysis (from the City's agenda item): All products and services required to launch the DC pilot project were donated or loaned as a public-service effort. The 12-block area includes 16 "access points" (antennas with associated electronics package) that radiate 11 Mbps of available bandwidth, providing users with wireless access in the coverage area to e-mail, access the Internet, and to do instant messaging from their laptop or PDA (with the appropriate Ethernet card). The City is exploring options for expanding the wireless network to support municipal and commercial data services. However, prior to expanding beyond the 20-block area, an in-depth analysis is needed to determine the long-term viability, cost and potential returns of such an endeavor, and whether DC provides real and measurable benefits over other existing wireless infrastructures, including 800 Mhz data, cellular and UHF/VHF, and to assess the opportunity to acquire some services from existing providers (Sprint, Comcast, KMC, etc.) that would reduce the long term costs.

Internal City Applications. Recognizing that the City is likely to be the primary user of the Digital Canopy network on a citywide level, seven functional areas have been identified where a high-speed wireless network could improve service: (1) **Utilities** - Mobile Workforce Management; (2) **Traffic** - Additional cameras for traffic monitoring; (3) **Police** - Improved communication, data download/upload, safety and monitoring; (4) **Fire** - Improved communication, data download/upload, safety and monitoring; (5) **Parking Enforcement** - Data download/upload, mobile workforce enablement; (6) **Code Inspection** - Mobile data communication; and (7) **GIS** - Real time updating integrated with a GPS module. During the transition period, the business analysis will determine each system's business requirements and determine if these can be met by the existing wireless systems.

Other Potential Wireless Applications. The wireless network could be: (1) expanded to cover six City community centers and, if funds were raised through community efforts and grants, to provide households served by the centers with wireless cards and computers; (2) managed as a cost center (utility) so the City recovers its infrastructure investment (the City estimated the 12-block network could be managed annually at full cost recovery with 500 subscribers paying \$39.99/month); and (3) expanded to cover the city limits to meet community opportunities and workforce productivity initiatives.

Please feel free to call Pat Curtis (488-5813) or Kim Dressel (487-0613) if you have any questions or seek additional information.